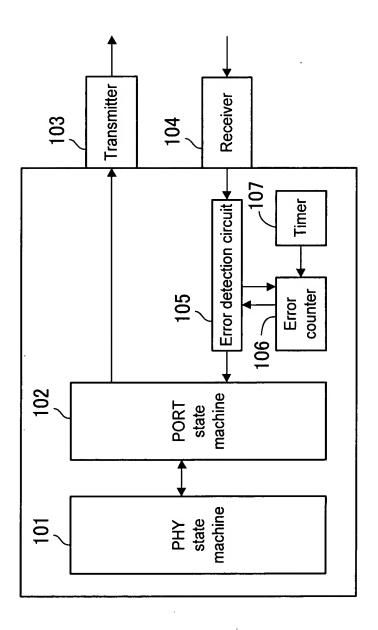
FIG.1



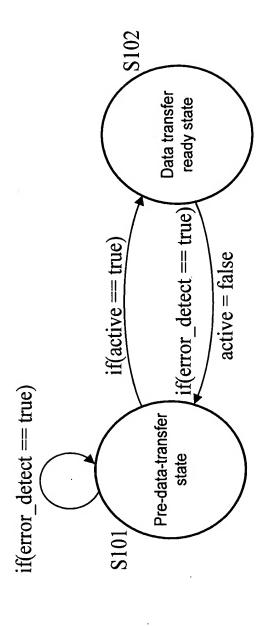
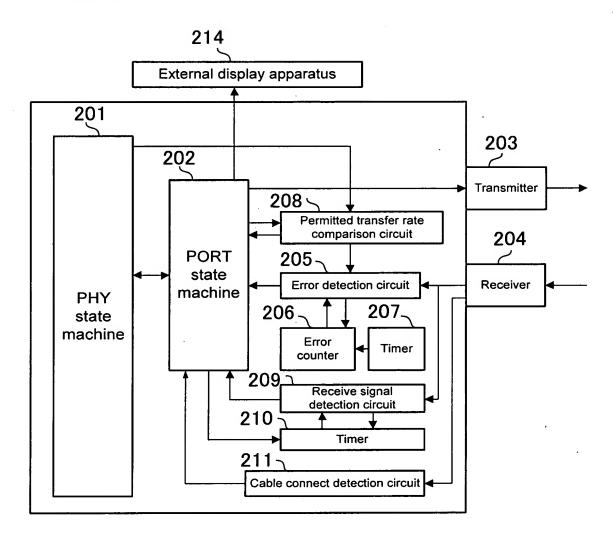


FIG.3



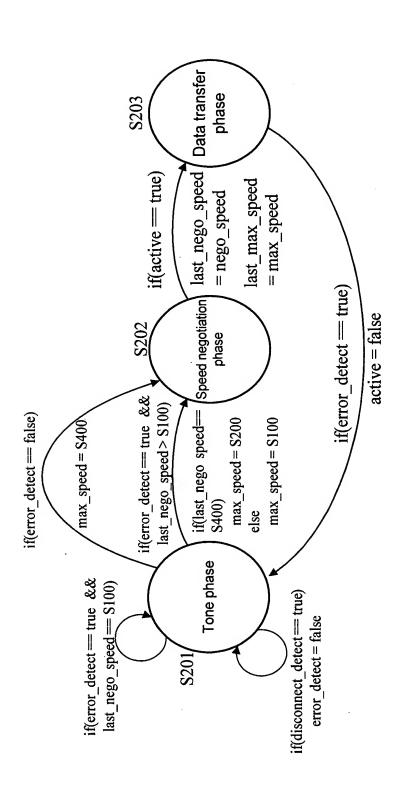
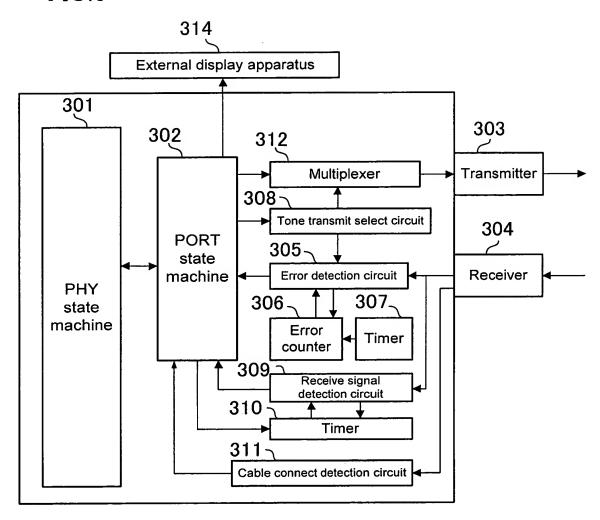


FIG.5



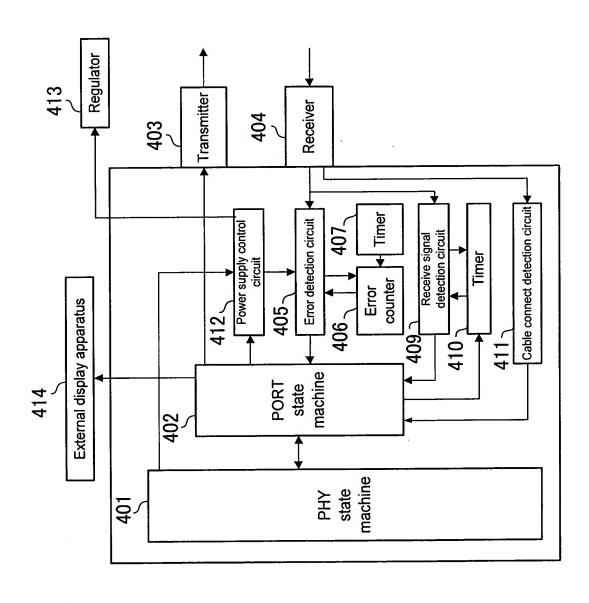
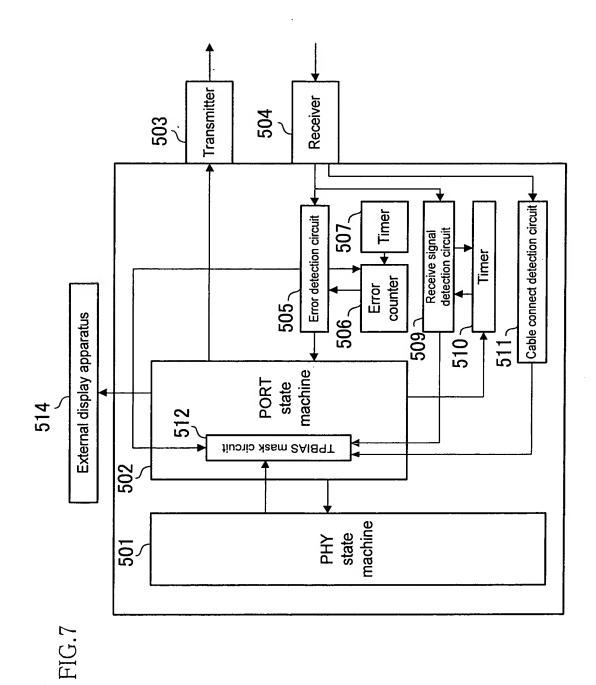


FIG.6



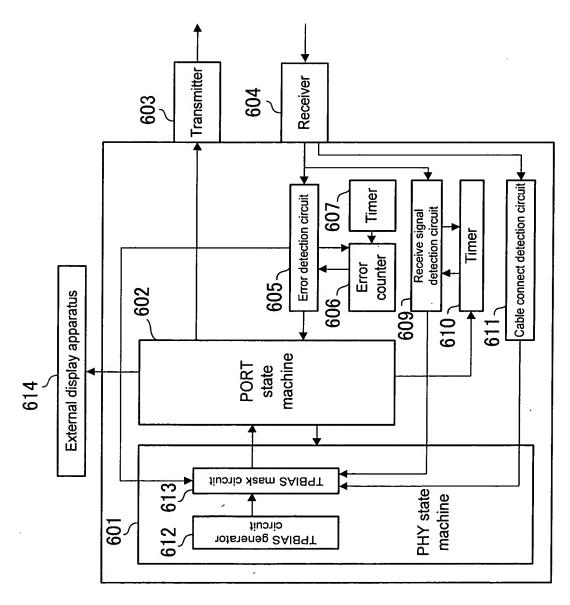
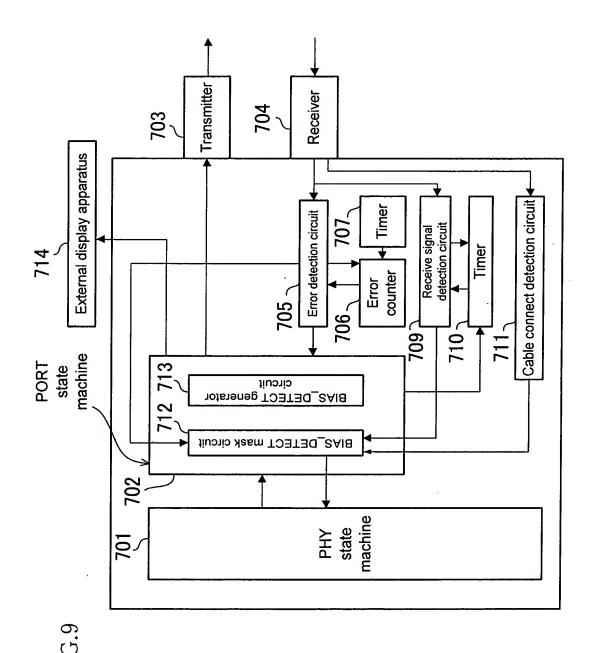
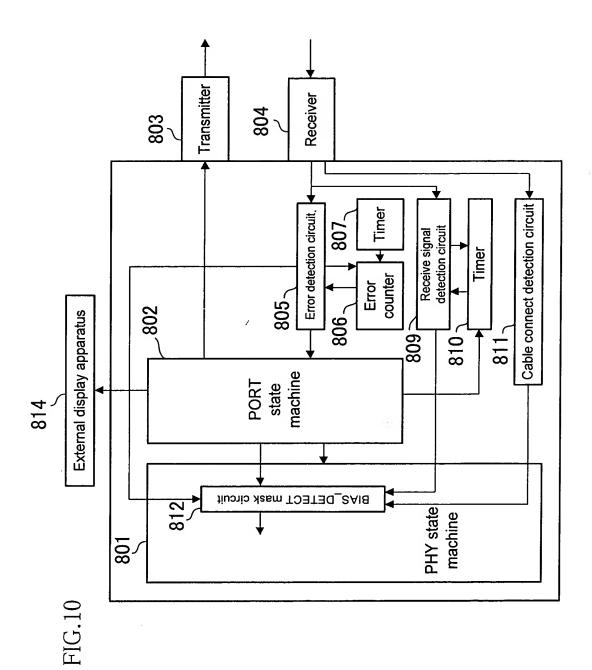


FIG.8





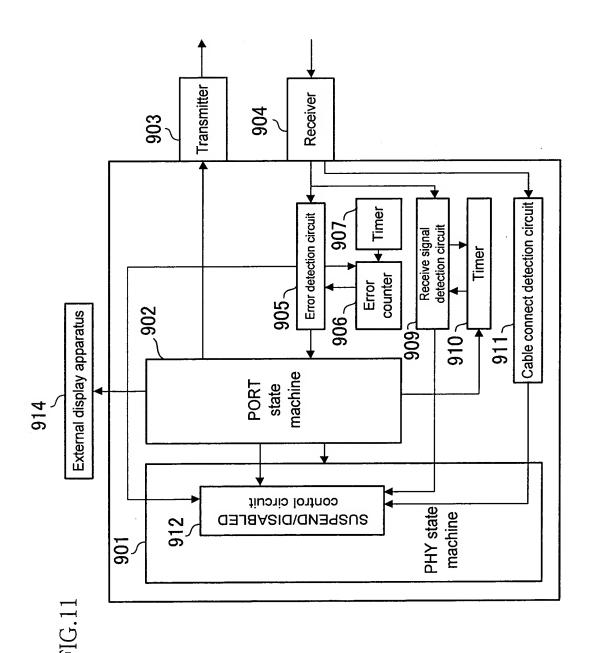


FIG.12

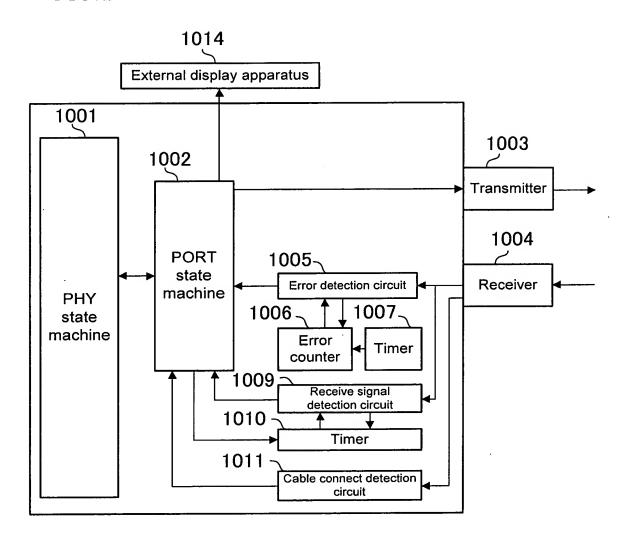
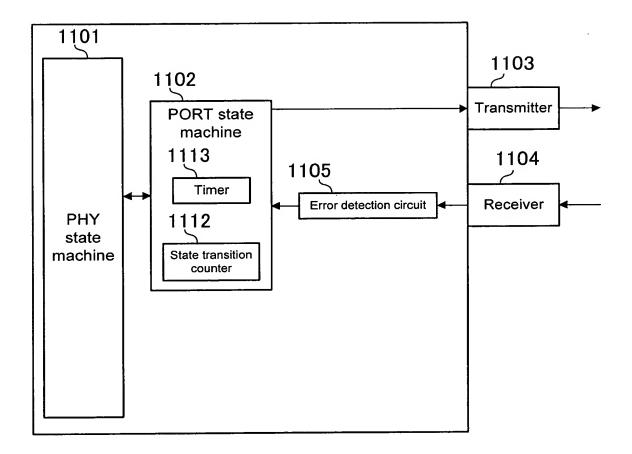
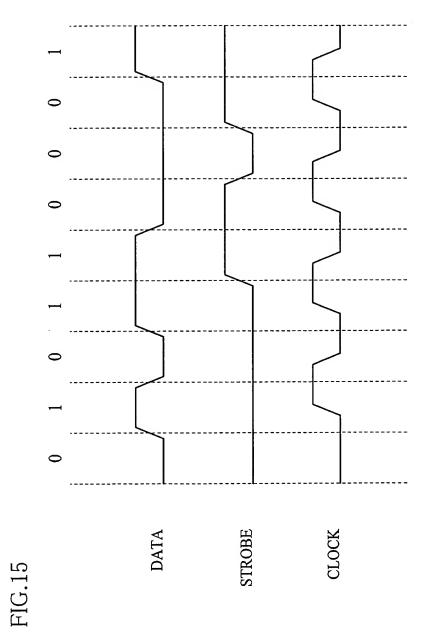


FIG.13

FIG.14

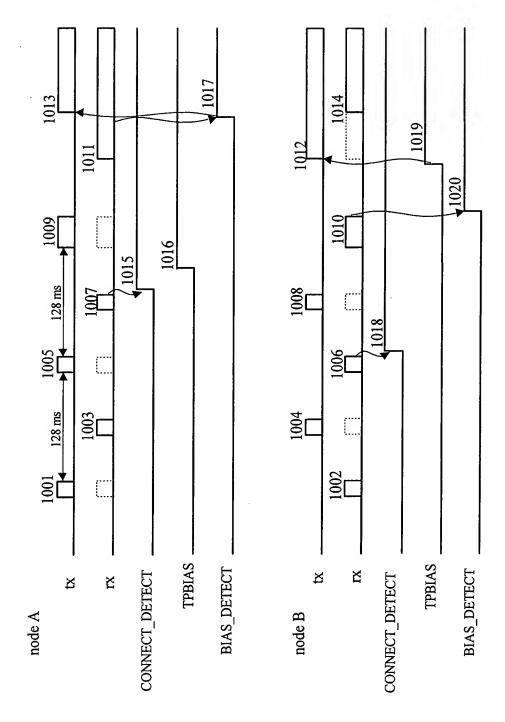




Transmit Arbitration Signal	Itration Signal		
ARB_A_Tx	ARB_B_Tx	Line State	Comment
Z	Z	IDLE	Transmitted to indicate gap
7	c	TX_REQUEST	Transmitted to parent node in order to request access to bus
7	o	TX_GRANT	Transmitted to child node when access to bus granted
7	*	TX_PARENT_NOTIFY	Transmitted to candidate parent node during tree-ID phase
7	-	TX_DISABLE_NOTIFY	Transmitted in order to disable
0	0	TX_SUSPEND	Transmitted in order to suspend connected port
0		TX_DATA_PREFIX	Transmitted before packet data or before packet data of linked subaction
-	7	TX_CHILD_NOTIFY	Transmitted to child node in order to acknowledge PARENT_NOTIFY
-	7	TX_IDENT_DONE	Transmitted to parent node in order to indicate conclusion of self-ID phase
-	0	TX_DATA_END	Transmitted at time of termination of packet transfer
. 1		BUS_RESET	Transmitted in order to reconfigure bus

FIG.17

Receive Arbit	Receive Arbitration Signal		
		Line State	
ARB_A_Rx	ARB_B_Rx		Comment
Z	Z	3TOI	PHY of neighboring connected node is nonoperational
7	c	RX_PARENT_NOTIFY	PHY of neighboring connected node is attempting to become child
7	0	RX_REQUEST_CANCEL	PHY of neighboring connected node has cancelled request
2	1	RX_IDENT_DONE	PHY of child node has concluded self-ID phase
c	7	RX_SELF_ID_GRANT	PHY of parent node has granted access to bus for purpose of self-ID
O	7	RX_REQUEST	PHY of child node is requesting access to bus
		RX_ROOT_CONTENTION	PHY of this node and of neighboring connected node are both attempting to become child nodes
0	0	RX_GRANT	PHY of parent node has granted control of bus
		RX_SUSPEND	Neighboring connected node is attempting to suspend this node
0	-	RX_PARENT_HANDSHAKE	PHY of neighboring connected node is acknowledging PARENT_NOTIFY
		RX_DATA_END	PHY of neighboring connected node has terminated transmission of data block and is releasing bus
-	7	RX_CHILD_HANDSHAKE	PHY of neighboring connected node is acknowledging TX_CHILD_NOTIFY
-	7	RX_DISABLE_NOTIFY	PHY of neighboring connected node is attempting to disable this node
, -	0	RX_DATA_PREFIX	PHY of neighboring connected node is attempting to transmit packet data or is attempting to transmit more data after terminating transmission of data block
1	1	BUS_RESET	Transmitted in order to reconfigure bus



7

									lase										lase
55	DATA	36	DATA			12	00		Data transfer phase	~	DATA	6	DATA]	00		Data transfer phase
29 2035	d_ne	30 2036	end_nego			31 2037	B3	1	Data	2038	d ne	3 2039	d ne			7040	B3	1	Data
2029	keep_speed	2030	keep_speed		S200	2031	B2			2032	keep_speed	2033	keep_speed	1	S200	2034	B2		
2023		2024	\vdash			2025			ohase	2026	data	2027	├─			2028			hase
2015	random data	2016	random_data	2017		2018	B1		Speed negotiation phase	2019	random	2020	random_data	2021		2022	B1		Speed negotiation phase
2	higher_speed		higher_speed	2		2	B2		Speed ne		higher_speed	2(higher_speed	2(B2		Speed ne
2009		2010	random_data h		S100	2011				2012	random_data h	2013	\dashv		S100	2014			
201	random_data	2002	rando	003		904	Bl			2005	randor	90	random_data	2007		2008	B1		
2 <mark>0</mark>	云		۲ <u>۲</u>	2 <u>0</u>	ı	73.	,	,			末	5002	ద		ا ج		e e		
node A			•		peer_speed		state			node B					peer_speed		state		